DRAFT AGENDA

8:00 - 8:30 AM Arrive, Breakfast: coffee, tea, bagels and cream cheese, donuts

8:30-8:50 AM Welcome, logistics and introduction- Bill Walter

8:50 - 12:30 Model Overviews with a Break from 10:30-10:50 AM
Brief summary of each groups modeling efforts in Eurasia addressing specific questions:
A) How were the model(s) constructed (what data set(s) does it fit, what is the parameterization)
B) What problems are the models designed to solve (location, phase-match Ms, etc.)
C) Strengths and weaknesses of the particular model (e.g. *a priori* vs. tomography, resolution)
D) Validation plans and uncertainty estimates

Each group representative to talk for no more than 15 minutes and use no more than 10 viewgraphs with 5 minutes extra for interactive questions and discussions. At the 20 minute mark we move to the next group.
1) LLNL - Michael Pasyanos and staff
2) Weston - Michelle Bernard-Johnson
3) Colorado - Mike Ritzwoller
4) SAIC/CMR - Istvan Bondar/Joydeep Bhattacharyya
5) St. Louis - Bob Herrmann/Chuck Ammon
6) LANL - Chris Bradley
7) NM - Tom Hearn
8) UCSD - Gabi Laske
9) SAIC/Maxwell - Jeff Stevens/Dave Adams
10) USGS - Walter Mooney

12:30-1:30 - Catered Lunch (sandwiches) and informal discussions

1:30-3:30 Comparisons of Models
Comparison of each group's models in this region. This is not to see whose is better but simply to observe and better understand the differences between them. This is also one way to start getting at the issues of uncertainties in the models. For the selected comparisons we will plot all models on the same scale and make difference graphs.
We will display the model comparisons on the password protected part of the web site.
Username: workshop
Password: model101

1) Comparison of 1-D profiles - Open discussion
    We will start discussion by presenting plots of the models and their statistics.
    We ask each group to please submit it's 1-D P-wave, S-wave and density profiles (depth, values) from the surface to 660 km depth for the 6 locations listed below to Michael Pasyanos via e-mail (pasyanos1@llnl.gov) as soon as possible (no later than April 9th) so they can all be plotted and statistics run. Plots will be posted to the

password protected portion of the web site. Check the web site for the LLNL model and IASPEI model plots. The 1-D profile locations are:
a) Station NIL location, (33.6506 N, 73.2686 E)
b) Station ABKT location (37.9304 N, 58.1189 E)
c) May 11, 1998 Indian Test Location (from Barker et al., 1998) (27.078, 71.719)
d) May 28, 1998 Pakistani Test Location (from Barker et al., 1998) (28.830, 64.945)
e) Arabian Sea, an oceanic site - 18.0 N 65.0 E
f) Station HALM location (possible site for Saudi IMS primary) (22.8454, 44.3173)

We will make and display for discussion several comparison plots and difference statistics (e.g. mean, standard deviation, range of values) for the crust and mantle parts of the profiles.

2) Comparison of 2-D profiles and observables - Open discussion
Again the discussion will start with plots comparing the cross sections, the travel times and the group velocity curves. We have chosen recent events that are less likely to have been used in the construction of the models. Please do not add them to your models if they are not already there as we are trying to stimulate discussion on the issue of travel-time and group-velocity predictability without circularity.

Cross-sections 1A and 1B - January 26, 2001 Indian earthquake to NIL and AAK
These stations only differ by 4 degrees in back azimuth and come close to providing two prediction points along the same cross section from the Indian quake to AAK.
(23.419 N, 70.323 E to 33.6506 N, 73.2686 E and 42.6333 N, 74.4944 E)

Cross-section 2 - August 8, 2000 Turkmenistan-Iran border earthquake to KIV
(38.117 N, 57.376 E to 43.9553 N, 42.6863 E)

a) Depth versus Range: P-wave Velocity plots
b) Travel time prediction for the first arrival time (assume a source depth of 10 km)
c) Rayleigh and Love wave group velocity comparison (periods 10-100 s)

Again we ask that groups please provide data ahead of time. Groups will have the choice of providing data to Steve Myers to make plots, calculate travel time and calculate group velocities or doing it themselves. If you want us to provide any of these we need each group to send evenly spaced depth versus P velocity data to Steve Myers (myers30@llnl.gov) by April 4th. Alternatively you can make your own cross section of P velocity using the LLNL supplied GMT script and color palette table (next e-mail) and send us a postscript file of the result. Also you can calculate your own P travel time and Rayleigh and Love group velocity curves. Please send the postscript or PDF plots, travel times and group velocity curves to Steve Myers (myers30@llnl.gov) by April 9th.

3) Comparison of 3-D properties - Open discussion
Again we will start of the discussion with plots comparing the particular model surfaces. Again groups have a choice: We ask you to please either send 3-D model data (lon, lat, values) to Michael Pasyanos (pasyanos1@llnl.gov) by April 9th or use the LLNL provided color palette tables and GMT scripts to make and send us postscript files (for

the whatever part of the model fits in the box from 10 - 50 N latitude and 40-80 E Longitude). The GMT Scripts and color palette table were provided in an e-mail on March 29 from Bill Walter.

   a) Sediment thickness plot
   b) Crustal thickness plot
   c) P-wave velocity slices, plots at the following depths:
      i)   5 km below sea level
      ii)   15 km below sea level
      iii)   75 km below sea level
      iv)   200 km below sea level

3:30-3:45 Break

3:45 - 5:00 PM Open discussion and development of recommendations:
   a) Exchanges – references, ground truth, data, models, formats, etc.
   b) methods to combine datasets
   c) methods to validate models
   d) methods to quantify and propagate uncertainty
   e) future workshops